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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:	
Wayne IHDE	Attorney Docket No.: ROXIP136
Application No: 09/614,065	Examiner: Battaglia, Michael V.
Filed: July 11, 2000	Group Art Unit: 2652
For: METHODS FOR OPTICAL DISC SECTOR VERIFICATION	Date: June 2, 2004

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Signed: _____
Michael K. Hsu

TRANSMITTAL OF APPEAL BRIEF
(PATENT APPLICATION -- 37 CFR 192)

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Sir:

This Appeal Brief is in furtherance of the Notice of Appeal filed in this case on March 29, 2004. The Notice of Appeal was received by the USPTO on April 2, 2004. Therefore, the due date for this Appeal Brief is June 2, 2004. This Appeal Brief is transmitted in triplicate:

This application is on behalf of:

☐ Small Entity ☒ Large Entity

Pursuant to 37 CFR 1.17(f), the fee for filing the Appeal Brief is:

☐ $165.00 (Small Entity) ☒ $330.00 (Large Entity)

The proceedings herein are for a patent application and the provisions of 37 CFR 1.136 apply:

☐ Applicant petitions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)-(d)) for the total number of months checked below:

Months	Large Entity	Small Entity
☐ one	$110.00	$55.00
☐ two	$420.00	$210.00
☐ three	$950.00	$475.00

☐ If an additional extension of time is required, please consider this a petition therefor.

☐ An extension for __ months has already been secured and the fee paid therefor of $ is deducted from the total fee due for the total months of extension now requested.

☒ Applicant believes that no extension of term is required. However, this conditional petition is being made to provide for the possibility that Applicant has inadvertently overlooked the need for a petition and fee for extension of time.

Total Fees Due:

Notice of Appeal Fee	$330.00
Extension Fee (if any)	$_____
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☒ Enclosed is Check No. 11161 in the amount of $330.00.

☒ Charge any additional fees or credit any overpayment to Deposit Account No. 50-0850, (Order No. ROXIP136). Two copies of this transmittal are enclosed.

Respectfully submitted,
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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

EX PARTE Wayne Ihde

Application for Patent

Filed July 11, 2000

Application No. 09/614,065

FOR:

METHODS FOR OPTICAL DISC SECTOR VERIFICATION

APPEAL BRIEF

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REAL PARTY IN INTEREST

The real party in interest is Roxio, Inc., the assignee of the present application.

II. RELATED APPEALS AND INTERFERENCES

The undersigned is not aware of any related appeals or interferences.

III. STATUS OF THE CLAIMS

Claims 1, 2, 4, 7-9, 11, 15-18, 20, and 21 are pending in the subject application. Claims 3, 10, and 19 have been canceled. Claims 5, 6, and 12-14 have been allowed. Claims 1, 2, 4, 7-9, 11, 15-18, 20, and 21 have been finally rejected and are on appeal.

IV. STATUS OF THE AMENDMENTS

Applicant has not submitted any amendment subsequent to final rejection.

V. SUMMARY OF THE INVENTION

The subject invention is directed towards methods for verifying sectors on an optical disc. In these methods, as user data is being written to sectors of the optical disc, the sectors are being verified at the same time. In one example, user data is first written to unverified sectors of the optical disc. Thereafter, the unverified sectors are verified by comparing the written user data with the user data stored on a system buffer. If the written user data does not match the user data stored on a system buffer, then the sector is unacceptable for data storage. As a result, the user data written to the sector in which an error is detected is written to another sector of the optical disc.

In one example, a bitmap is used to track which sectors of the optical disc have been verified. In particular, after verification is complete, the bitmap is updated to reflect which sectors on the optical disc have been verified such that the verified sectors are not verified again when another user data is written to the already verified sector. The bitmap is updated regardless of whether or not errors were found in the verified

sectors. When the optical disc completes disc verification, the bitmap is deleted from the optical disc.

VI. ISSUE

A. Whether Claims 1, 2, 7-9, 11, 15, 17-18, and 20 are Patentable under 35 U.S.C. § 102(e) over Ito et al. (U.S. Patent No. 6,160,778).

B. Whether Claims 1, 9, and 17 are Patentable under 35 U.S.C. § 102(b) over Nozawa et al. (U.S. Patent No. 4,525,839).

C. Whether Claims 4, 16, and 21 are Patentable under 35 U.S.C. § 103(a) over Ito et al. in View of Brown et al. (U.S. Patent No. 5,337,197).

VII. GROUPING OF THE CLAIMS

For purposes of this appeal only, claims 1, 2, 4, 7, and 8 stand or fall together and claims 9, 11, 15-18, 20, and 21 stand or fall together.

VIII. ARGUMENTS

A. Ito et al. and Nozawa et al. Do Not Describe the Subject Matter of Claims 9, 11, 15, 17, 18, and 20.

Claims 9, 11, 15, 17, 18, and 20 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,160,778 to Ito et al. The Examiner additionally rejected claims 9 and 17 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,525,839 to Nozawa et al. As will be fully explained below, Applicant respectfully asserts that Ito et al. and Nozawa et al. fail to identically disclose each and every feature specified in independent claims 9 and 17.

Independent claims 9 and 17 define methods for verifying sectors on an optical disc. Specifically, the independent claims define that user data from a source are written to sectors of the optical disc and the sectors are verified by comparing the written user data to the user data resident on the source to determine whether any one of the sectors is defective.

In support of the 35 U.S.C. §102(e) rejection, the Examiner noted that Ito et al. disclose writing user data from a source to sectors of the optical disc and, subsequently, the sectors are verified by comparing the written user data to user data resident on the source to determine whether any one of the sectors is defective. Applicant respectfully traverses the Examiner's characterization of Ito et al. relative to independent claims 9 and 17 because the portions of the reference relied upon by the Examiner (column 18, lines 24-62 and column 19, lines 41-44 and 46-48) do not teach writing user data to sectors of the optical disc and, subsequently, the sectors are verified by comparing the written user data to user data resident on the source to determine whether any one of unverified sectors having the user data is defective. Specifically, Ito et al. merely disclose a defective area detection section 731 that detects defective blocks (column 18, lines 42-44). However, Ito et al. do not disclose anywhere in the specification in detail how the defective blocks are detected.

Similarly, the Examiner also noted that Nozawa et al. disclose writing user data from a source to sectors of the optical disc and, subsequently, the sectors are verified by comparing the written user data to user data resident on the source to determine whether any one of the sectors is defective. Again, Applicant respectfully traverses the Examiner's characterization of Nozawa et al. relative to independent claims 9 and 17 because the portion of the reference relied upon by the Examiner (column 5, lines 10-22) does not teach writing user data to sectors of the optical disc and, subsequently, the sectors are verified by comparing the written user data to user data resident on the source to determine whether any one of unverified sectors having the user data is defective. Specifically, Nozawa et al. merely disclose control methods after the detection of a read or write error by "an error checking read operation" (column 1, lines 25-27 and column 5, lines 22-40). However, Nozawa et al. do not disclose anywhere in

the specification in detail how the error checking read operation checks for read and write errors.

In response to the Applicant's arguments, the Examiner admits that "Ito does not disclose in detail how the defective sectors are detected," but notes "that in order to determine if a sector is defective, information written to a sector must be read and compared with what the information should be i.e. correct information" (see Advisory Action mailed April 15, 2004 at page 2). The Applicant respectfully traverses the Examiner's characterization because independent claims 9 and 17 do not define just any information for verifying sectors on an optical disc. Instead, the independent claims particularly define that user data is used for verifying sectors on the optical disc. As such, the Applicant asserts that the Examiner's factual assertion is not properly based upon common knowledge, and particularly notes that the Examiner did not provide adequate evidence that user data is used for verifying sectors on the optical disc (see M.P.E.P. §2144.03).

As Ito et al. and Nozawa et al. do not disclose any detailed methods to detect errors, Ito et al. and Nozawa et al. cannot reasonably be considered to place the public in possession of the methods defined in independent claims 9 and 17. As such, Ito et al. and Nozawa et al. cannot reasonably be considered to teach writing user data from a source to sectors of the optical disc and, subsequently, the sectors are verified by comparing the written user data to user data resident on the source to determine whether any one of the sectors is defective, as defined in independent claims 9 and 17.

As Ito et al. and Nozawa et al. fail to disclose each and every element of the claimed invention, Applicant respectfully submits that independent claims 9 and 17 are patentable under 35 U.S.C. § 102(e) over Ito et al. and under 35 U.S.C. § 102(b) over

Nozawa et al. Further, dependent claims 11, 15, 18, and 20, each of which directly or indirectly depends from independent claims 9 and 17, are submitted to be patentable under 35 U.S.C. § 102(e) over Ito et al. and under 35 U.S.C. § 102(b) over Nozawa et al. for the reasons set forth above. Thus, the rejections of claims 9, 11, 15, 17, 18, and 20 under 35 U.S.C. § 102(e) as being unpatentable over Ito et al. and under 35 U.S.C. § 102(b) over Nozawa et al. are improper and should be reversed.

B. Ito et al. and Nozawa et al. Do Not Describe the Subject Matter of Claims 1, 2, 7, and 8.

Claims 1, 2, 7, and 8 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Ito et al. The Examiner additionally rejected independent claim 1 under 35 U.S.C. §102(b) as being anticipated by Nozawa et al. For the same reasons as stated in independent claims 9 and 17, Ito et al. and Nozawa et al. do not disclose any detailed methods to detect errors. Further, as will be fully explained below, Ito et al. do not teach a bitmap that tracks which sectors of the optical disc have been verified, as defined in independent claim 1.

Independent claim 1 defines a method for verifying sectors on an optical disc. Specifically, independent claim 1 defines writing user data to unverified sectors of the optical disc and verifying the unverified sectors of the optical disc by reading the user data on the unverified sectors of the optical disc. Further, a bitmap is written to a bitmap area, whereby the bitmap tracks which sectors of the optical disk have been verified.

In support of the 35 U.S.C. §102(e) rejection, the Examiner notes that Ito et al. teach the bitmap that tracks which sectors of an optical disc have been verified, as defined in independent claim 1. Applicant respectfully traverses the Examiner's

characterization of Ito et al. relative to independent claim 1 because the portions of the reference relied upon by the Examiner (column 19, lines 41-44 and 46-48) do not teach the bitmap that tracks which sectors of the optical disc have been verified.

In particular, the Examiner "interprets the file management creation section as a bitmap area and the used areas, which are not defective, as verified sectors." The Examiner then noted that "Ito teaches the tracking of verified sectors in a bitmap area because the verified sectors are marked with a '1'" (see Final Office Action mailed January 28, 2004 at page 4). If the Examiner's interpretations are true, then one must logically conclude that the file management creation section marks non-verified sectors with a '0' because, according to the Examiner, the file management creation section tracks which sectors are verified.

However, Ito et al. teach the file management information creation section that sets a "0" ("free") for skipped areas and a "1" ("used") for data "recorded in areas other than the skipped areas" (column 19, lines 40-41, 44, and 46-48). To determine whether an area is to be skipped, a defective area detection section 731 initially detects whether a block is defective, and "[e]ach time a defective block is detected, ... the location of the defective block is stored in the recording location storing memory 733" (column 18, lines 41-47). Thus, Ito et al. teach that all blocks are checked (*i.e.*, termed "verified" by the Examiner) initially for defects to determine whether the blocks are to be skipped. If a defect is detected, the defective block is assigned a "0" for skipped areas. Otherwise, non-defective blocks are assigned a "1" for data recorded in areas other than skipped areas. As a result, Ito et al. teach that both skipped "0" blocks and used "1" blocks are initially verified (*i.e.*, checked for defects).

However, the fact that all blocks are initially verified is in direct conflict with

the Examiner's deduced interpretation that the file management creation section marks non-verified sectors or blocks with a "0." On the contrary, Ito et al. teach that a block assigned a "0" is also initially verified. Thus, the Examiner's conclusion that verified blocks are marked with a "1" is only partially correct as, in accordance to Ito et al., verified blocks are also marked with a "0." Since the file management creation section assigns the verified blocks with either a "0" or "1," the file management creation section does not actually track which blocks are verified because the file management creation section does not differentiate between verified and non-verified blocks.

In response to the Applicant's arguments discussed above, the Examiner notes that "there are no claim limitations requiring the bitmap of the claimed invention is to track unverified sectors" and, as a result, the Examiner interprets a verified sector as "a sector that has been determined to not be defective" (see Advisory Action mailed April 15, 2004 at page 2). The Applicant's respectfully traverses the Examiner's assertion as independent claims 1 clearly defines tracking of unverified sectors. In particular, independent claim 1 defines writing user data to unverified sectors of the optical disc and verifying the unverified sectors of the optical disc by reading the user data on the unverified sectors of the optical disc. The fact that user data is written to unverified sectors and that unverified sectors are verified necessitate the tracking of unverified sectors.

In light of the Examiner's interpretation, the Examiner then notes that Ito et al. teach a file management information creation section that "tracks verified sectors by marking them with a '1' ... that the sectors that have not been set to '1' in the bitmap area are either defective or unverified" (see Advisory Action mailed April 15, 2004 at page 2). Here, the Examiner essentially asserts that Ito et al. teach a file management

information creation section that does not keep track of unverified sectors. In contrast, independent claim 1 clearly and unequivocally defines the bitmap that tracks which sectors of the optical disc have been verified. As a result, the Examiner's interpretation of Ito et al. necessitates a differentiation with the claimed invention. Accordingly, Ito et al. cannot reasonably be considered to teach the bitmap that tracks which sectors of the optical disk have been verified, as defined in independent claim 1.

As Ito et al. and Nozawa et al. fail to disclose each and every element of the claimed invention, Applicant respectfully submits that independent claim 1 is patentable under 35 U.S.C. § 102(e) over Ito et al. and under 35 U.S.C. § 102(b) over Nozawa et al. Further, dependent claims 2, 7, and 8, each of which directly or indirectly depends from independent claim 1, are submitted to be patentable under 35 U.S.C. § 102(e) over Ito et al. and under 35 U.S.C. § 102(b) over Nozawa et al. for the reasons set forth above. Thus, the rejections of claims 1, 2, 7, and 8 under 35 U.S.C. § 102(e) as being unpatentable over Ito et al. and under 35 U.S.C. § 102(b) over Nozawa et al. are improper and should be reversed.

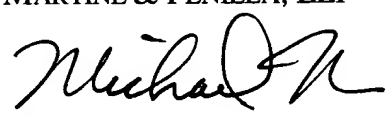
C. The Combination of Ito et al. in View of Brown et al. Would Not Have Suggested to One Having Ordinary Skill in the Art the Subject Matter of claims 4, 16, and 21.

Claims 4, 16, and 21 stand rejected under 35 U.S.C. §103(a) rejections as being unpatentable over Ito et al. in view of U.S. Patent No. 5,337,197 to Brown et al. As discussed above, Ito et al. do not disclose each and every feature of independent claims 1, 9, and 17. As such, Ito et al. do not raise a prima facie case of obviousness against any of the dependent claims 4, 16, and 21. Accordingly, the obviousness rejections of dependent claims 4, 16, and 21 are improper and should be reversed.

D. Conclusion

For the foregoing reasons, the rejections of claims 1, 2, 7-9, 11, 15, 17-18, and 20 under 35 U.S.C. § 102(e), claims 1, 9, and 17 under 35 U.S.C. § 102(b), and claims 4, 16, and 21 under 35 U.S.C. §103(a) are improper and should be reversed. In formulating the rejection of these claims, the Examiner has improperly characterized the teachings of Ito et al. and Nozawa et al. Additionally, when considered objectively without the benefit of Applicant's teachings, the combination of Ito et al. in view of Brown et al. does not establish a *prima facie* case of obviousness against the claimed invention. Accordingly, Applicant respectfully submits that the anticipation rejections under 35 U.S.C. § 102(e) and 35 U.S.C. §102(b), and the obviousness rejections under 35 U.S.C. §103(a) are improper, and requests that the Board of Patent Appeals and Interferences reverse these rejections on appeal.

Respectfully submitted,
MARTINE & PENILLA, LLP



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APPENDIX A

CLAIMS ON APPEAL

1. A method for verifying sectors on an optical disc, comprising:

writing user data to unverified sectors of the optical disc;

verifying the unverified sectors of the optical disc by reading the user data on the unverified sectors of the optical disc;

comparing the user data read from the unverified sectors of the optical disc with user data stored on a system buffer to determine whether any one of the unverified sectors having user data is defective, the verifying of the unverified sectors establishing verified sectors having user data;

verifying a bitmap area on the optical disc; and

writing a bitmap to the bitmap area, wherein the bitmap tracks which sectors of the optical disc have been verified.

2. A method for verifying sectors on an optical disc as recited in claim 1, further comprising:

verifying a file system area on the optical disc; and

writing a file system to the file system area, wherein the file system is a data structure for locations of the user data on the optical disc.

4. A method for verifying sectors on an optical disc as recited in claim 1, further comprising:

deleting the bitmap after verification of the optical disc is complete.

7. A method for verifying sectors on an optical disc as recited in claim 2, further comprising:

sparing user data contained on a defective sector.

8. A method for verifying sectors on an optical disc as recited in claim 7, further comprising:

updating the file system after the user data has been moved to a different sector of the optical disc in the sparing operation.

9. A method for verifying media of an optical disc, comprising:

writing user data from a source to sectors of the optical disc;

verifying the sectors of the optical disc by comparing the written user data to user data resident on the source to determine whether any one of the sectors is defective; and

writing a bitmap to the optical disc, the bitmap being used to determine which of the sectors on the optical disc have been verified.

11. A method for verifying media of an optical disc as recited in claim 9, further comprising:

writing a file system to the optical disc, wherein the file system contains a data structure for the user data written to the sectors of the optical disc.

15. A method for verifying media of an optical disc as recited in claim 9, further comprising:

updating the bitmap after the sectors of the optical disc have been verified.

16. A method for verifying media of an optical disc as recited in claim 15, further comprising:

deleting the bitmap from the optical disc after the optical disc has been verified.

17. A method for optical disc verification, comprising:

writing user data located on a system buffer to sectors of the optical disc;

verifying the sectors of the optical disc by reading the user data from the sectors on the optical disc and comparing the user data read from the sectors of the optical disc with the user data stored on the system buffer to determine if any of the sectors of the optical disc are defective, and

writing a bitmap that tracks which of the sectors of the optical disc have been verified.

18. A method for optical disc verification as recited in claim 17, further comprising:

writing a file system area to the sectors of the optical disc; and

writing a file system to the file system area of the optical disc, wherein the file system contains a data structure for the user data written to the sectors of the optical disc.

20. A method for optical disc verification as recited in claim 17, further comprising:

updating the bitmap as the sectors of the optical are verified.

21. A method for optical disc verification as recited in claim 20, further comprising:

deleting the bitmap after the optical disc has been verified.